

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

CARNEGIE INSTITUTION OF WASHINGTON,
M7D CORPORATION,

Plaintiffs,

v.

PURE GROWN DIAMONDS, INC. and
IIA TECHNOLOGIES PTE. LTD d/b/a
IIA TECHNOLOGIES,

Defendants.

PURE GROWN DIAMONDS, INC.,

Counterclaim-Plaintiff,

v.

CARNEGIE INSTITUTION OF WASHINGTON,
M7D CORPORATION,

Counterclaim-Defendants.

Civil Action No. 1:20-cv-00189-JSR

**DECLARATION OF MATTHEW MOFFA IN SUPPORT OF PLAINTIFFS' MEMORANDUM
OF LAW IN OPPOSITION TO DEFENDANTS' MOTION FOR SUMMARY JUDGMENT**

I, Matthew Moffa, am an attorney with the firm of Perkins Coie LLP, and counsel for Carnegie Institution of Washington, and M7D Corporation. I make this declaration in support of Plaintiffs' Memorandum of Law in Opposition to Defendants Motion for Summary Judgment and in Support of Plaintiffs' Rule 56.1 Statement of Facts.

1. Attached as **Exhibit 1** is a true and correct copy of the Expert Report of Michael Capano, Ph.D. Regarding Infringement of U.S. Patent Nos. 6,858,078 and RE41,189, dated September 18, 2020.

2. Attached as **Exhibit 2** is a true and correct copy of the Expert Report of Karen K. Gleason, Ph.D. Regarding Validity of U.S. Patent No. 6,858,078.

3. Attached as **Exhibit 3** is a true and correct copy of the Expert Report of Karen K. Gleason, Ph.D. Regarding Validity of U.S. Patent No. RE41,189.

4. Attached as **Exhibit 4** is a true and correct copy of excerpts of the deposition transcript of Russell J. Hemley, taken September 1-2, 2020.

5. Attached as **Exhibit 5** is a true and correct copy of the Judgment in *Element Six Technologies Ltd v. Ila Technologies Pte Ltd*, [2020] SGHC 26, Suit No 26 of 201.

6. Attached as **Exhibit 6** is a true and correct copy of excerpts of the rough drafts of the deposition transcripts of Christoph Nebel taken on October 25-26, 2020.

7. Attached as **Exhibit 7** is a true and correct copy of excerpts of the deposition transcript of Devi Misra, Ph.D., taken August 6, 2020.

8. Attached as **Exhibit 8** is a true and correct copy of Monitoring and Managing Growth Run, SOP Number: PRD-03. Carnegie_189_2AT-00145742-44.

9. Attached as **Exhibit 9** is a true and correct copy of the Element Six CVD Diamond Handbook, produced in this litigation bearing Bates Nos. CARN-PGD_00197842-69.

10. Attached as **Exhibit 10** is a true and correct copy of U.S. Patent Application No. 2001/0031237 to Vagarli et al, for High Pressure/High Temperature Production of Colorless and Fancy Colored Diamonds, issued October 18, 200, produced in this litigation bearing Bates Nos. Carnegie_189_Defendants-00000815-0823.

11. Attached as **Exhibit 11** is a true and correct copy of U.S. Patent No. 4,174,380 to Strong et al. for Annealing Synthetic Diamond Type IB, issued November 13, produced in this litigation bearing Bates Nos. Carnegie_189_Defendants-00000695-706.

12. Attached as **Exhibit 12** is a true and correct copy of a Spreadsheet related to Run Requirements and Calculations, produced in this litigation bearing Bates Nos. Carnegie_189_2AT-00126992.

13. Attached as **Exhibit 13** is a true and correct copy of the Manual of Cubic Press, produced in this litigation bearing Bates Nos. Carnegie_189_2AT_00000557-576.

14. Attached as **Exhibit 14** is a true and correct copy of a Guilin Guiye Heavy Industries Co. CS-XII Instruction Manual, produced in this litigation bearing Bates Nos. Carnegie_189_2AT_00126977-991.

15. Attached as **Exhibit 15** is a true and correct copy of a Luoyang Manual, produced in this litigation bearing Bates Nos. Carnegie_189_2AT_00126956-976.

16. Attached as **Exhibit 16** is a true and correct copy of excerpts of *A New Choice in Diamonds*, produced in this litigation as bearing Bates Nos. Carnegie_189_PGD-00008957 - 75.

17. Attached as **Exhibit 17** is a true and correct copy of a December 8, 2014 Pure Grown Diamonds Press Release entitled *World's Largest Pure Grown Diamond Unveiled*, produced in this litigation bearing Bates Nos. CARN-PGD00000274-283.

18. Attached as **Exhibit 18** is a true and correct copy of excerpts of the deposition transcript of Yogesh K. Vohra, Ph.D., taken July 31, 2020.

19. Attached as **Exhibit 19** is a true and correct copy of excerpts of the deposition transcripts of Vishal Mehta, taken August 3-4, 2020.

20. Attached as **Exhibit 20** is a true and correct copy of excerpts of the deposition transcript of Shamik Ghosh, taken August 25, 2020.

21. Attached as **Exhibit 21** is a true and correct copy of U.S. Patent No. 8,992,877 to Misra for Method for Growing Monocrystalline Diamonds, issued March 31, 2015, produced in this litigation bearing Bates Nos. Carnegie_189_2AT-00000286-298.

22. Attached as **Exhibit 22** is a true and correct copy of a November 7, 2014 article published by Live Mint, titled Visha Mehat, The Conflict-free Diamond Maker, produced in this litigation bearing Bates Nos. Carnegie_189_2AT-00145993-145995.

23. Attached as **Exhibit 23** is a true and correct copy of spreadsheet titled Fixed Asset Balances, produced in this litigation bearing Bates Nos. Carnegie_189_2AT-00131651-131654.

24. Attached as **Exhibit 24** is a true and correct copy of Awadesh Kumar Mallik, *Microwave Plasma CVD Grown Single Crystal Diamonds - A Review*, J. Coating Sci. & Tech, 3, 75-99, 2016, produced in this litigation bearing Bates Nos. CARN-PGD_163707-163731.

25. Attached as **Exhibit 25** is a true and correct copy of excerpts of the deposition transcripts of Filip De Weerd, taken October 19-20, 2020.

26. Attached as **Exhibit 26** is a true and correct copy of M.G. Jubber et al., *Design of a UHV reactor for microwave plasma deposition of diamond films*, 45(5) VACUUM 499 (1994).

27. Attached as **Exhibit 27** is a true and correct copy of U.S. Patent No. 5,311,103 to Asmussen et al. titled Apparatus for the Coating of Material on a substrate Using a Microwave or UHF Plasma, issued May 10, 1994.

28. Attached as **Exhibit 28** is a true and correct copy of European Patent Application Publication No. EP 0 879 904 A1 to Hirohisa Saito for Method and apparatus for production single-crystalline diamond, published November 25, 1998.

29. Attached as **Exhibit 29** is a true and correct copy of Provisional application No. 60/331,073.

30. Attached as **Exhibit 30** is a true and correct copy of WO 03/040440 published May 15, 2003.

31. Attached as **Exhibit 31** is a true and correct copy of correspondence from J. Preston Long dated May 6, 2020.

32. Attached as **Exhibit 32** is a true and correct copy of a document produced in this litigation bearing Bates No. Carnegie_189_2AT-00144991.

33. Attached as **Exhibit 33** is a true and correct copy of a document produced in this litigation bearing Bates Nos. Carnegie_189_2AT-00158057-72.

34. Attached as **Exhibit 34** is a true and correct copy of The Affidavit of Mehta Vashal Jatin, in the matter of Element Six Technologies Limited and IIA Technologies PTE, Ltd, In the High Court of the Republic of Singapore, dated February 1, 2019, produced in this litigation bearing Bates Nos. Carnegie_189_2AT-00158235-158296.

35. Attached as **Exhibit 35** is a true and correct copy of excerpts of a Growth Log Report, produced in this litigation bearing Bates Nos. Carnegie_189_2AT-00021242-23340.

36. Attached as **Exhibit 36** is a true and correct copy of excerpts of a Machine Run Sheet, produced in this litigation bearing Bates Nos. Carnegie_189_2AT-00063465-64614.

37. Attached as **Exhibit 37** is a true and correct copy of a spreadsheet entitled High Quality Growth, produced in this litigation bearing Bates No. Carnegie_189_2AT-00157377.

38. Attached as **Exhibit 38** is a true and correct copy of a document titled Operating Software Documentation - B series, produced in this litigation bearing Bates Nos. Carnegie_189_2AT-00145004-39.

39. Attached as **Exhibit 39** is a true and correct copy of excerpts of the rough draft of the deposition transcript of Michael Capano, taken October 20, 2020.

40. Attached as **Exhibit 40** is a true and correct copy of US Patent No. 10,100,433 to Nebel et al. for Substrate Holder, Plasma Reactor and Method for deposition Diamond, issued October 16, 2018.

41. Attached as **Exhibit 41** is a true and correct copy of the Initial Expert Report of Dr. Christoph E. Nebel Regarding the Invalidity of Claims 1, 6, 11, 12, 16, and 20 of U.S. Patent No. 6,858,078.

42. Attached as **Exhibit 42** is a true and correct copy of excerpts of the deposition transcript of Yarden Tsach, taken August 27, 2020.

43. Attached as **Exhibit 43** is a true and correct copy of P.K. Bachmann, *Plasma Chemical Vapor Deposition of Diamond Films*, The Physics of Diamond 45-51 (1997).

44. Attached as **Exhibit 44** is a true and correct copy of C. Wild et al., *Oriented CVD diamond films: twin formation, structure and morphology*, Diamond & Related Materials, 3, 373-381 (1994).

45. Attached as **Exhibit 45** is a true and correct copy of W. Müller-Sebert et al., *Nitrogen induced increase of growth rate in chemical vapor deposition of diamond*, Appl. Phys. Lett. 68 (6), 759-760 (1996).

46. Attached as **Exhibit 46** is a true and correct copy of Kadek W. Hemawan and Russell J. Hemley, *Microwave Plasmas: Single Crystal Diamond Synthesis*, *ENCYCLOPEDIA OF PLASMA TECH.* 806 (2017), produced in this litigation as bearing Bates Nos. CARN-PDG_00079907-79919.

47. Attached as **Exhibit 47** is a true and correct copy of Initial Expert Report of Dr. Filip De Weerdts Regarding the Invalidity of Claims 1 and 2 of U.S. Patent No. RE41,189.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury, under the laws of the United States, that the foregoing is true and correct to the best of my knowledge.

Dated this 28th day of October 2020.

s/ Matthew Moffa
Matthew Moffa

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